

REMARKS

Claims 23-36 were rejected in an Office Action dated December 14, 2009. Claims 23 and 28 have been amended, and claim 26 has been canceled. Support for the amendments may be found in the “Detailed Description of the Invention.” Applicants respectfully request reconsideration of the present application in view of the following remarks and claim amendments.

Rejections under 35 USC 102(b) – anticipated by Reed

Claims 23-29, 31, 35, and 36 are rejected under 35 USC 102(b) as being anticipated by Reed US 3,349,396 (hereinafter “Reed”). Applicant respectfully traverses for the following reason. Reed is directed to a blanket of radar attenuating material comprising 1) layers of electrically thin sheets of resistive material that are spaced apart in the same order of magnitude as one-fourth of the wavelength of radiation in the frequency range of radar, and 2) a layer of embossed electrically conductive plastic sheet beneath and/or between each of the radar attenuating material layers. All of the layers are enveloped in a waterproof plastic sheet. Where the layers are enclosed in a plastic, waterproof envelope, Applicant respectfully asserts that one skilled in the art would not understand this to read on a garment that comprises an infrared reflective material comprising a water-vapor permeable metallic ply in concert with an air permeable convective ply.

While some of the layers of Reed are perforated to reduce weight, this reference is clearly distinguishable for the following reason. The perforated material layers of Reed would not be air permeable within the structure as claimed by Applicant since the blanket is enclosed in a plastic envelope.

In one particular embodiment, Reed teaches a garment having multiple layers of material, including 1) a conventional waterproof outer camouflage fabric layer in stacked arrangement with several layers of 2) flexible absorber sheet of fabric coated with elastomer and carbon dispersed therein each alternating with 3) a spacer sheet, and 4) a metalized sheet of plastic below the spacer sheet. This arrangement does not disclose or suggest Applicant’s claim to a material comprising an air permeable convective layer adjacent a water-vapor permeable layer since the spacer sheet of Reed is below both the waterproof outer layer and the absorber sheet (therefore, there is no airflow exchange with the environment,

and not air permeable within the structure), and since Reed does not disclose or suggest that the metalized plastic is water-vapor permeable. While Reed does disclose a cotton fabric as an inner lining of a jacket, the jacket has the waterproof outer fabric and multiple sheets of plastic material. The cotton layer is underneath layers of impermeable and waterproof materials and therefore, does not function as an air permeable layer as claimed, defined, and described by the instant specification.

In the instant application, “air-permeable” is described as having an air permeability of not less than $100\text{I/m}^2\text{s}$ at an air pressure of 10Pa in the z-direction, and not less than $50\text{I/m}^2\text{s}$ in the lateral direction (x and y directions) at 10Pa (see pages 7, 9, and page 16), so that “air enters the convective ply, flows over the surface of the metalized ply and absorbs heat or cold,... and transports it away to the environment”. One skilled in the art could only arrive at the current claims by picking and choosing from among the disclosures of Reed without regard to the teachings of the reference in its entirety. And even if one were to pick and choose among the disclosure of Reed, there is no specific disclosure of an air permeable layer facing the outer garment surface, where the air permeable layer is atop the top surface of a metallic layer that is water vapor permeable.

Moreover, Applicant asserts that there is no motivation to modify Reed to read on the instant claims as amended where Reed requires specificity with regard to the material construction to ensure effectiveness at the radar range (*layers of electrically thin sheets of resistive material that are spaced apart in the same order of magnitude as one-fourth of the wavelength of radiation in the frequency range of radar*); there is no reasonable expectation that such modification would allow it to work for its intended purpose. Further, there is no motivation to modify Reed to get to the claimed invention where all embodiments recite a waterproof component, and waterproofness may, for example, be required to ensure radar absorption which may be affected when the covering is wet.

Reed does not suggest modification, or identify any benefit that would be achieved by a modification that would arrive at the instant claims. No further objective evidence has been presented beyond Reed to provide the motivation necessary to modify Reed in a manner that would ensure IR camouflage, e.g., by providing air exchange and a metal layer that reflects IR. The metalized plastic sheet of Reed is behind an absorber layer which one skilled in the art may believe to block the IR radiation and prevent the result that Applicant intends to achieve.

Removal of the rejection is therefore respectfully requested.

Rejections under 35 USC 103(a) – over Reed in view of Kim

Claim 30 is rejected under 35 USC 103(a) as being unpatentable over Reed in view of Kim et al. US 6,007,898 (hereinafter "Kim"). Where claim 30 is dependent upon claim 1, which Applicant believes is patentable for the reasons set forth above and where Kim does nothing to overcome the limitations of Reed, Applicant believes claim 30 is also patentable.

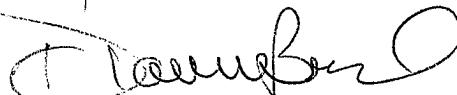
Rejections under 35 USC 103(a) – over Reed

Claims 32-34 are rejected under 35 USC 103(a) as being unpatentable over Reed. Where claims 32-34 are dependent upon claim 1, which Applicant believes is patentable for the reasons set forth above. Applicant believes these claims also are patentable.

Conclusion

For the foregoing reasons, the present invention as defined by the claims is neither taught nor suggested by any of the references of record. Accordingly, Applicants respectfully submit that these claims are now in form for allowance. If further questions remain, Applicants request that the Examiner telephone Applicants' undersigned representative before issuing a further Office Action.

Respectfully submitted,



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